A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N1/20 C12P17/18 A61K31/535 C12R1/465 //(C12P17/18,C12R1:465)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12N C12P C12R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 194 378 A (SALITURO ET AL) 16 March 1993 (1993-03-16) cited in the application	18-20
Α	column 1, line 66 - column 5, line 24 column 7, line 57 - column 8, line 2 examples 1,2	1-3
X	US 5 116 756 A (DUMONT ET AL) 26 May 1992 (1992-05-26) cited in the application	18-20
Α	claim 1	1-3
X	US 4 894 366 A (OKUHARA ET AL) 16 January 1990 (1990-01-16) cited in the application	18-20
Α	column 8, line 58 - column 13, line 22 examples 1,2 claim 12	1-3
	-/	4

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.				
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	"T' later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "8" document member of the same patent family				
Date of the actual completion of the international search 14 April 2005 Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Date of mailing of the international search report 04/05/2005 Authorized officer van de Kamp, M				

		71820047003380
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Category *	Chance of document, with indication, where appropriate, or the relevant passages	Tibliotalii to Galliiniisi
X	US 5 624 842 A (OKUHARA ET AL) 29 April 1997 (1997-04-29) cited in the application	18-20
Α	claim 1	1-3
Α	MOTAMEDI H ET AL: "The biosynthetic gene cluster for the macrolactone ring of the immunosuppressant FK506" EUROPEAN JOURNAL OF BIOCHEMISTRY, vol. 256, no. 3, 1998, pages 528-534, XP000906738 ISSN: 0014-2956 abstract page 528, right-hand column, line 16 - page 529, left-hand column, line 30	
A	REYNOLDS K A ET AL: "Rapamycin, FK506, and ascomycin-related compounds" DRUGS AND THE PHARMACEUTICAL SCIENCES, vol. 82, no. 82, 1997, pages 497-520, XP000906777 ISSN: 0360-2583 the whole document	

INTERNATIONAL SEARCH REPORT

remational application No. PCT/IB2004/003380

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X Claims Nos.: — Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 18 and 19 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box ill Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
·
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
As only some of the required additional search fees were timely paid by the applicant, this international Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest.
No protest accompanied the payment of additional search fees.

formation on patent family members

intional Application No '/IB2004/003380

			/10	2004/003380
Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US 5194378 A	16-03-1993	US CA EP JP	5116756 A 2059706 A1 0497515 A1 5130860 A	26-05-1992 29-07-1992 05-08-1992 28-05-1993
		JP	6091816 B	16-11-1994
US 5116756 A	26-05-1992	CA	2059706 A1	29-07-1992
		EP JP	0497515 A1 5130860 A	05-08-1992 28 - 05-1993
		JP	6091816 B	16-11-1994
		US	5194378 A	16-03-1993
US 4894366 A	16-01-1990	AT	104984 T	15-05-1994
		AU	592067 B2	04-01-1990
		AU CA	5059685 A 1338491 C	12-06-1986 30-07-1996
		CN	85109492 A ,B	10-06-1986
		CN	1056103 A ,C	13-11-1991
		CY	1912 A	30-11-1985
		DE	3587806 D1	01-06-1994
		DE DE	3587806 T2 19575026 I2	25-08-1994 28-03-2002
		DK	556285 A	04-06-1986
		EP	0184162 A2	11-06-1986
		ES	8705038 A1	01-07-1987
		FI	854731 A ,B,	
		FI	864527 A ,B,	07-11-1986 01-04-1986
		GR HK	852904 A1 18596 A	09-02-1996
		ΗÜ	41842 A2	28-05-1987
İ		HU	198064 B	28-07-1989
		ΙE	62865 B1	08-03-1995
		IL	77222 A 92345 A	10-06-1991 10-06-1991
		IL JP	2828091 B2	25-11-1998
		JP	10067783 A	10-03-1998
1		JP	3211891 B2	25-09-2001
		JP	11343294 A	14-12-1999
		JP	2976966 B2	10-11-1999 19-01-1999
		JP JP	11012281 A 1686568 C	19-01-1999
		JP	3046445 B	16-07-1991
		JP	3072483 A	27-03-1991
		JP	1983737 C	25-10-1995
		JP	3072484 A	27-03-1991 08-03-1995
		JP JP	7020970 B 2746134 B2	08-03-1995 28-04-1998
		JP	7224066 A	22-08-1995
		JP	1670486 C	12-06-1992
		JP	3038276 B	10-06-1991
		JP	61148181 A	05-07-1986
		KR KR	9310704 B1 9310705 B1	08-11-1993 08-11-1993
		KR	9310705 B1 9310706 B1	08-11-1993
		KR	9310707 B1	08-11-1993
		KR	9310708 B1	08-11-1993
		LU	90317 A9	11-01-1999
		MX	9202943 A1	30-06-1992

formation on patent family members

ational Application No /IB2004/003380

IIC 4	1904266			NL	960023	T 1	02-12-1996
US 4	1894366	Α		NL NO	854833		04-06-1986
				NO	168372		04-11-1991
				NZ	214407		28-11-1989
US 5	5624842	Α	29-04-1997	US	6028097		22-02-2000
				US	2003170831		11-09-2003
				US	6201005 2003229115		13-03-2001 11-12 - 2003
				US US	2003229113		12-02-2004
				US	6482845		19-11-2002
				US	5830717		03-11-1998
				AT	104984		15-05-1994
				ΑÚ	592067		04-01-1990
				AU	5059685		12-06-1986
				CA	1338491		30-07-1996
				CN	85109492		10-06-1986
				CN	1056103	A ,C	13-11-1991
				CY	1912	Α	30-11-1985
				DE	3587806		01-06-1994
				DE	3587806		25-08-1994
				DE	19575026		28-03-2002
				DK	556285		04-06-1986
				EP	0184162		11-06-1986
				ES	8705038		01-07-1987
				FI	854731		04-06-1986
				FI GR	864527 852904		07-11-1986 01-04-1986
				HK	18596		09-02-1996
				HU	41842		28-05-1987
				HU	198064		28-07-1989
				ΙE	62865		08-03-1995
				ĬĹ	77222		10-06-1991
				IL	92345		10-06-1991
				JP	2828091	B2	25-11-1998
				JP	10067783		10-03-1998
				JP	3211891		25-09-2001
				JP	11343294		14-12-1999
				JP	2976966		10-11-1999
				JP	11012281		19-01-1999
				JP	1686568		11-08-1992
				JP	3046445		16-07-1991 27-03-1991
				JP JP	3072483 1983737		27-03-1991 25-10-1995
				JP	3072484		27-03-1991
				JP	7020970		08-03-1995
				JP	2746134		28-04-1998
				JΡ	7224066		22-08-1995
				ĴΡ	1670486		12-06-1992
				ĴΡ	3038276		10-06-1991
				ĴΡ	61148181		05-07-1986
				KR	9310704		08-11-1993
				KR	9310705		08-11-1993
				KR	9310706		08-11-1993
				KR	9310707	B1	08-11-1993